

## REMARKS

Claims 1 - 10 remain active in this application. No new matter has been introduced into the application. The withdrawal of previous grounds of rejection based on prior art in view of the previous response is noted with appreciation.

Claims 1 - 6 have been rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter; the Examiner opining that the claims are directed to subject matter that merely manipulates data or an abstract idea or solves a mathematical problem, and claims 7 - 10 have also been rejected (in three separate rejection statements) under 35 U.S.C. §101 as being drawn to non-statutory subject matter; the Examiner opining in each statement that the claims are drawn to non-functional descriptive material. These grounds of rejection and the Examiner's stated rationale underlying the same are respectfully traversed.

As stated in the response filed October 13, 2004, in regard to claims 1 - 6:

"The invention is directed to a data format using flags to indicate whether or not the block of intermediate data or the intermediate data for an entire frame has certain commonly occurring features which result from data compression which ordinarily (for example, under the JPEG standard) must be detected by testing of each pair of bytes (used for each AC coefficient) for non-zero value coefficients and/or whether or not extra bits are required for unique coding of coefficient values and other processing such as loading (sixteen) zero-valued coefficients during decoding. By indicating either or both of these conditions on the compressed

data with flag bits for each block or frame, such testing become unnecessary which reduces by a factor of two to four the number of memory read and write operations necessary to obtain the coefficient information from the compressed code (see page 14, lines 4 - 22) and reduces processing time sufficiently to allow other common operations such as rotation to be performed with practical levels of processing power."

In other words, the method recited calls for testing of data for a specifically recited quality and includes information representing the result of that testing in the data itself so that the time and processing overhead for performing such testing at a later stage where processing power and time are at a premium can be avoided.

Therefore, it is clearly seen that the invention does, indeed, support production of (and "produces" to the extent that the additional information added to the data encoded as flags is not ignored during further processing such as decoding) "a useful, concrete and tangible result" and is thus manifestly statutory subject matter as well as manifestly being an application in the technological arts supporting a physical transformation (e.g. image reconstruction and/or manipulation) outside a computer as is both disclosed and which is abundantly evident to those of ordinary skill in the art, contrary to the Examiner's assertions. Further, the method of coding recited in these claims also manifestly supports accomplishment of a practical application (particularly in regard to the "testing recitation as previously recited and especially as now amended), also contrary to the Examiner's assertions.

Moreover, it is respectfully submitted that all of claims 1 - 6, as currently rejected, already answer all

three of the Examiner's suggestions for establishing that the claimed process produces a "useful, concrete and tangible result. Specifically, claims 1 and 2 - 6, depending therefrom all recite "coding image data into at least one block of data including a plurality of coefficient values" (emphasis added) which manifestly represents a physical object or activity transformed from outside the computer as well as pre-computer processing activity (especially in regard to claims 2, 3 and 6 which recite additional transformations or testing prior to at least the step of "using a flag..." recited in claim 1 and a direct recitation of a practical application in the technological arts.

Accordingly, it is respectfully submitted that the ground of rejection asserted in regard to claims 1 - 6 is without basis in fact based of the explicit recitations of the claims and the claims are already free from the deficiencies the Examiner asserts (and especially so in view of the amendments made above to claim 1) and already embody the Examiner's suggestions and are in conformance with the precedents on which the Examiner evidently relies. The Examiner has clearly failed to make any *prima facie* demonstration that the claims are "devoid of any limitation to a practical application" as is clearly not the case and, particularly, the Examiner has not done so in the manner required by M.P.E.P. §2106 (II) (A) discussed in greater detail below. Therefore, reconsideration and withdrawal of the rejection of claims 1 - 6 are respectfully requested.

In regard to claims 7 - 10, it is respectfully submitted that, while the claims are drawn to a data format, they are not drawn merely to "non-functional descriptive material" as the Examiner asserts. Again, the recited data format includes, in addition to the recited coefficient values in a block of data, "at least one flag indicating if all said coefficient

values in said block are coded in eight bits or fewer or if any requires more than eight bits to be uniquely coded". This feature of the data format is clearly functional since it supports the omission of testing processes during further processing such as decoding of the data and is also distinctive since it represents information not ordinarily included in the data since it is essentially redundant in the sense that it can be determined/recovered from the remainder of the data but, by the same token, represents a quality of the data which allows control of interpretation of the data (e.g. to determine which bits correspond to a particular coefficient which is otherwise not delineated in the data) without requiring that information to be determined or recovered in the course of such further processing where processing power and/or processing time may be critical or at a premium, especially if additional manipulations of the data (within the same processing power and time constraints) may be desired, as has been often found to be the case.

Thus, it is respectfully submitted that while a claim directed to a particular data format may necessarily be descriptive of that format (as any claim must be descriptive of the subject matter of the invention) it does not necessarily follow from the quality of descriptiveness that the subject matter described is non-functional. The recitations of first and second pairs of bytes in the claimed format are also functional in that a decoder can unambiguously locate/detect them. By the same token, these recitations also effectively specify an interrelationship between the data and the computer, decoder or other processor, contrary to the Examiner's apparent position in the quoted passages of the M.P.E.P. (In this regard, it is also respectfully submitted that the Examiner's assertion that a decoder, such as for compressed image data, is not a computer is

not well-taken since general-purpose processors were used for an extended period of time as decoders in commercial set-top-boxes (STBs) and have been recently replaced by special purpose processors. Similarly, the Examiner's analogy to a program or algorithm embodied on a computer readable medium is not well-taken since the invention, as recited, includes additional information which controls interpretation of other data by a decoder and certainly constitutes an interrelationship with the operation and function of a decoder or other processor but does not control the entirety of the processing.) On the contrary, the M.P.E.P. clearly states (§2106 (II) (A) (paragraphs 6 and 7) that "[o]ffice personnel have the burden to establish a *prima facie* case that the claimed invention as a whole is directed to *solely* an abstract idea or manipulation of abstract ideas or do not produce a useful result" and that "[o]nly when the claim is *devoid of any limitation to a practical application in the technological arts* should it be rejected under 35 U.S.C. 101" (emphasis added) and further indicates that "[o]ffice personnel should ... focus their efforts on pointing out statements in the specification which identify practical applications for the invention" and "should rely of such statements throughout the examination when assessing the invention for compliance with all statutory criteria" and further noting that "only one [practical application] is necessary to satisfy the utility requirement"; diametrically contrary to the Examiner's apparent position in the present office action. The features necessary to accomplish at least one asserted practical application are undeniably present in all of claims 1 - 10 and the Examiner has made no demonstration to the contrary. Therefore, it is respectfully submitted that the asserted ground(s) of rejection of claims 7 - 10, as well as the rejection of claims 1 - 6 is/are similarly

without basis in fact and, upon reconsideration, should be withdrawn as untenable as contrary to statute, precedent and practice of the USPTO as enunciated in the M.P.E.P. and such action is respectfully requested.

Since all rejections, objections and requirements contained in the outstanding official action have been fully answered and shown to be in error and/or inapplicable to the present claims, it is respectfully submitted that reconsideration is now in order under the provisions of 37 C.F.R. §1.111(b) and such reconsideration is respectfully requested. Upon reconsideration, it is also respectfully submitted that this application is in condition for allowance and such action is therefore respectfully requested.

If an extension of time is required for this response to be considered as being timely filed, a conditional petition is hereby made for such extension of time. Please charge any deficiencies in fees and credit any overpayment of fees to Deposit Account No. 09-0440 of International Business Machines Corporation (Tucson).

Respectfully submitted,



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